## **Amendments to the Claims:**

- 1. (Original) A pharmaceutical composition for the treatment of cancer comprising an effective amount of a compound having two gold(I) atoms each covalently bonded to a carbon atom in a covalent link connecting the two gold(I) atoms and a pharmaceutically acceptable excipient.
- 2. (Original) A pharmaceutical composition in accordance with claim 1, wherein said compound has a first gold(I) atom covalently bonded to a first carbon atom and a second gold(I) atom covalently bonded to a second carbon atom.
- 3. (Original) A pharmaceutical composition in accordance with claim 2, wherein said compound comprises a substituted or unsubstituted aromatic group as part of the covalent link.
- 4. (Previously Presented) A pharmaceutical composition in accordance with claim 2, wherein the first carbon atom is part of a substituted or unsubstituted aromatic group.
- 5. (Original) A pharmaceutical composition in accordance with claim 4, wherein the substituted or unsubstituted aromatic group is a substituted or unsubstituted phenyl group.
- 6. (Previously Presented) A pharmaceutical composition in accordance with claim 2, wherein the second carbon atom is part of a substituted or unsubstituted alkyl, alkene, alkyne, aryl or aromatic group.
- 7. (Original) A pharmaceutical composition in accordance with claim 6, wherein the aromatic group of which the second carbon atom is a part is a substituted or unsubstituted phenyl group.

8. (Previously Presented) A pharmaceutical composition in accordance with claim 2, wherein said compound incorporates a moiety having the formula:

$$Au^{1}$$
  $C^{1}$   $Z_{n}$   $C^{2}$   $Au^{2}$ 

where:  $Au^1$  is said first gold (I) atom;  $Au^2$  is said second gold (I) atom;  $C^1$  is said first carbon atom;  $C^2$  is said second carbon atom; Z is a linking group; and n is 0 or 1.

- 9. (Previously Presented) A pharmaceutical composition in accordance with claim 1, wherein said compound comprises a ligand bonded to each of said gold(I) atoms, each of said ligands being individually selected from the group consisting of PR<sub>3</sub>, P(OR)<sub>3</sub>, CNR, NCR, PR<sub>n</sub>(CH<sub>2</sub>OR<sup>‡</sup>)<sub>3-n</sub>, N<sub>4</sub>C<sub>6</sub>H<sub>12</sub>, [N<sub>4</sub>C<sub>6</sub>H<sub>12</sub>-N-CH<sub>3</sub>]<sup>+</sup>, PN<sub>3</sub>C<sub>6</sub>H<sub>12</sub>, and P[N<sub>3</sub>C<sub>6</sub>H<sub>12</sub>-N-CH<sub>3</sub>]<sup>+</sup>, where R is a substituted or unsubstituted hydrocarbon moiety and R<sup>‡</sup> is selected from the group consisting of H, Me, SO<sub>2</sub><sup>-</sup>, PO<sub>3</sub><sup>-</sup>, alkyl and aryl, and each R<sup>‡</sup> in any one ligand is the same or different.
- 10. (Original) A pharmaceutical composition in accordance with claim 9, wherein R is a substituted or unsubstituted alkyl, alkene, alkyne, aryl or aromatic group and each R in any one ligand is the same or different.
- 11. (Previously Presented) A pharmaceutical composition in accordance with claim 9, wherein R is selected from the group consisting of methyl, ethyl, propyl, butyl and phenyl groups.
- 12. (Previously Presented) A pharmaceutical composition in accordance with claim 9, wherein the ligand is PPh<sub>3</sub>.

13. (Currently Amended) A pharmaceutical composition in accordance with claim 1, wherein said compound has the formula:

where: L and L' are ligands; R' and R" are substituted or unsubstituted divalent hydrocarbon moieties; a is  $0 \text{ }\Theta\text{f }\underline{\text{to}}$  3; b is  $0 \text{ }\Theta\text{f }\underline{\text{to}}$  3; R" is H,  $SO_3^-$ ,  $PO_4^{2-}$ ,  $CO_2H$ , OH,  $(CH_2)_nCH_3$ , O(CH<sub>2</sub>)<sub>n</sub>CH<sub>3</sub>, S(CH<sub>2</sub>)<sub>n</sub>CH<sub>3</sub>, or NR""C(O)(R"") where R"" and R"" are (CH<sub>2</sub>)<sub>n</sub>CH<sub>3</sub>; and n is 0 to 6.

14. (Original) A pharmaceutical composition in accordance with claim 13, wherein said compound has a formula selected from the group consisting of:

15. (Withdrawn) A pharmaceutical composition in accordance with claim 1, wherein said compound has the formula:

where: L and L' are ligands; R' and R" are substituted or unsubstituted divalent hydrocarbon moieties; a is 0 or 3; b is 0 or 3; R" is H,  $SO_3$ ,  $PO_4$ ,  $CO_2$ H, OH,  $(CH_2)_nCH_3$ , O(CH<sub>2</sub>)<sub>n</sub>CH<sub>3</sub>,  $CCH_2$ , or NR""C(O)(R"") where R"" and R"" are  $CCH_2$ , and n is 0 to 6.

16. (Withdrawn) A pharmaceutical composition in accordance with claim 1, wherein said compound has the formula:

$$R'''$$
 $(CH_2)_n$ 
 $X$ 
 $(CH_2)_m$ 
 $(R')_pAuL'$ 

where: L and L' are ligands; R' and R" are substituted or unsubstituted divalent hydrocarbon moieties; a is 0 or 3; b is 0 or 3; R" is H,  $SO_3^-$ ,  $PO_4^{2-}$ ,  $CO_2H$ , OH,  $(CH_2)_nCH_3$ , O(CH<sub>2</sub>)<sub>n</sub>CH<sub>3</sub>, S(CH<sub>2</sub>)<sub>n</sub>CH<sub>3</sub>, or NR""C(O)(R""") where R"" and R""" are (CH<sub>2</sub>)<sub>n</sub>CH<sub>3</sub>; and n is 0 to 6; and X is a linking group.

- 17. (Withdrawn) A pharmaceutical composition in accordance with claim 16, wherein X is selected from the group consisting of: O, S, PR or NR in which R is a substituted or unsubstituted hydrocarbon moiety.
- 18. (Withdrawn) A pharmaceutical composition in accordance with claim 1, wherein said compound has the formula:

where: L and L' are ligands; R' and R" are substituted or unsubstituted divalent hydrocarbon moieties; a is 0 or 3; b is 0 or 3; R" is H,  $SO_3^-$ ,  $PO_4^{2-}$ ,  $CO_2H$ , OH,  $(CH_2)_nCH_3$ , O(CH<sub>2</sub>)<sub>n</sub>CH<sub>3</sub>, S(CH<sub>2</sub>)<sub>n</sub>CH<sub>3</sub>, or NR""C(O)(R"") where R"" and R"" are (CH<sub>2</sub>)<sub>n</sub>CH<sub>3</sub>; and n is 0 to 6.

19. (Withdrawn) A pharmaceutical composition in accordance with claim 1, wherein said compound has the formula:

where Y is selected from the group consisting of (R')bAuL' and

where: L and L' are ligands; R' and R" are substituted or unsubstituted divalent hydrocarbon moieties; a is 0 or 3; b is 0 or 3; R" is H,  $SO_3^-$ ,  $PO_4^{2-}$ ,  $CO_2H$ , OH,  $(CH_2)_nCH_3$ , O(CH<sub>2</sub>)<sub>n</sub>CH<sub>3</sub>, S(CH<sub>2</sub>)<sub>n</sub>CH<sub>3</sub>, or NR""C(O)(R"") where R"" and R"" are (CH<sub>2</sub>)<sub>n</sub>CH<sub>3</sub>; and n is 0 to 6.

- 20. (Previously Presented) A pharmaceutical composition in accordance with claim 13, wherein L and L' are independently selected from the group consisting of  $PR_3$ ,  $P(OR)_3$ , CNR, NCR,  $PR_n(CH_2OR^{\ddagger})_{3-n}$ ,  $N_4C_6H_{12}$ ,  $[N_4C_6H_{12}-N-CH_3]^{\ddagger}$ ,  $PN_3C_6H_{12}$ , and  $P[N_3C_6H_{12}-N-CH_3]^{\ddagger}$ , where R is a substituted or unsubstituted hydrocarbon moiety and  $R^{\ddagger}$  is selected from the group consisting of H, Me,  $SO_2^{-}$ ,  $PO_3^{-}$ , alkyl and aryl, and each  $R^{\ddagger}$  in any one ligand is the same or different.
- 21. (Original) A pharmaceutical composition in accordance with claim 20, wherein R is a substituted or unsubstituted alkyl, alkene, alkyne, aryl or aromatic group and each R in any one ligand is the same or different.

- 22. (Previously Presented) A pharmaceutical composition in accordance with claim 20, wherein R is selected from the group consisting of methyl, ethyl, propyl, butyl and phenyl groups.
- 23. (Previously Presented) A pharmaceutical composition in accordance with claim 20, wherein the ligand is PPh<sub>3</sub>.
- 24. (Previously Presented) A pharmaceutical composition in accordance with claim 13, wherein R' and R" are each independently selected from the group consisting of methylene, ethylene, propylene, butylene and phenylene groups.
- 25. (Original) A compound having two gold(I) atoms each covalently bonded to a carbon atom in a covalent link connecting the two gold(I) atoms for use as a chemotherapeutic agent.

## 26.-30. (Canceled)

- 31. (Withdrawn) A method of treating a cancer in a human or animal patient comprising administering to said patient a therapeutically effective amount of a compound having two gold(I) atoms each covalently bonded to a carbon atom in a covalent link connecting the two gold(I) atoms.
- 32. (Withdrawn) A method in accordance with claim 31, wherein the cancer is resistant to a platinum drug.
- 33. (Withdrawn) A method in accordance with claim 32, wherein the cancer is resistant to cisplatinum and/or carboplatinum.
- 34. (Withdrawn) A method in accordance with claim 31, wherein the cancer is ovarian or lung cancer.

## 35. (Canceled)

- 36. (Withdrawn) A pharmaceutical composition for the treatment of cancer comprising an effective amount of a compound having a first gold atom which is a gold(III) atom and a second gold atom which is either a gold(I) atom or a gold(III) atom, each of said first and second gold atoms being covalently bonded to a carbon atom in a covalent link connecting the first and second gold atoms, and the or each gold(III) atom being reducible, *in vivo*, to a gold(I) atom, and a pharmaceutically acceptable excipient.
- 37. (Withdrawn) A pharmaceutical composition in accordance with claim 36, wherein said second gold atom is a gold(III) atom.
- 38. (Withdrawn) A compound having a first gold atom which is a gold(III) atom and a second gold atom which is either a gold(I) atom or a gold(III) atom, each of said first and second gold atoms being covalently bonded to a carbon atom in a covalent link connecting the first and second gold atoms, and the or each gold(III) atom being reducible, *in vivo*, to a gold(I) atom for use as a chemotherapeutic agent.

## 39. (Canceled)

40. (Withdrawn) A method of treating a cancer in a human or animal patient comprising administering to said patient a therapeutically effective amount of a compound having a first gold atom which is a gold(III) atom and a second gold atom which is either a gold(I) atom or a gold(III) atom, each of said first and second gold atoms being covalently bonded to a carbon atom in a covalent link connecting the first and second gold atoms, and the or each gold(III) atom being reducible, *in vivo*, to a gold(I) atom.